

37. USE OF SELF-TINDERING *CORDIA* FIRESAWS BY THE
BAIGA IN THE MAIKAL HILLS

(With a text-figure)

During zoological fieldwork in Kanha Tiger Reserve, Madhya Pradesh (22° 17'N, 80° 38'E), indigenous methods of firemaking by the Baiga forest tribe (Elwin 1939) were recorded. Although matches were commonly used, 'steel & flint' and firesaw methods persisted. The latter, locally called 'gursa', were usually made from branchlets of "lusari" (*Cordia myxa*, *Cordia latifolia*; Boraginaceae), a use not previously recorded for these species (Brandis 1874, Witt 1916). Brandis (1874) describes *Cordia* as soft, porous wood making

excellent fuel. The procedure used in the manufacture of a 'gursa' was as follows (Mungal Baiga pers. comm.). A 12" segment of dead *Cordia* branch, 1" diameter, was cut from a bush/small tree with a 'kulhari' or 'pursa' light axe. Once stripped of any bark the piece was split longitudinally, forming two halves, one becoming the base, one the saw (see Fig. 1). A 2-3" long longitudinal split was made at one end of the base, wedged open with a 1/2" wide pebble or twig. The base was placed upon a boulder or fallen tree and held, at the end

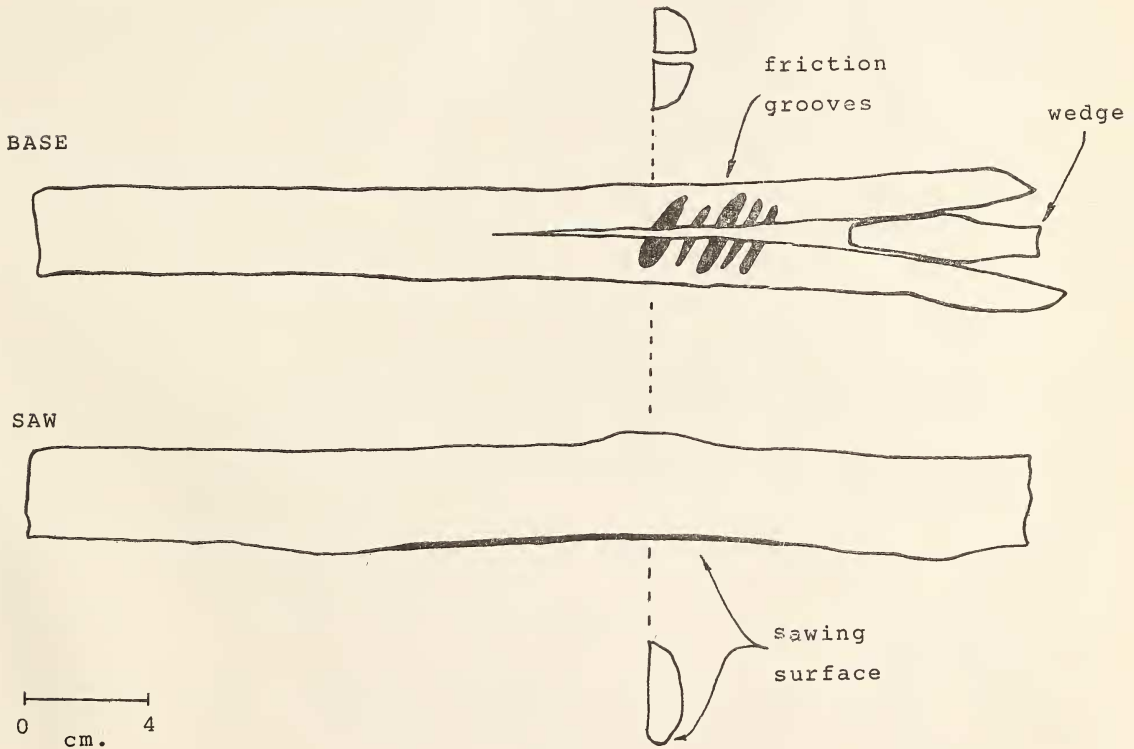


Fig. 1.

farthest from the notch, by the foot of a flexed leg. The operators body was stabilized by the extended opposite leg. The saw was held firmly, with a hand at each end, and its sharp edge stroked transversely across the notch which was floored by a dead leaf inserted between gursa and boulder.

With considerable vigour and downward pressure on the saw, it was repeatedly scoured across the base, a wisp of smoke appearing within some 10 strokes. The friction grooved the base, causing fine wood particles from both saw and base to collect in the notch. The leaf floor prevented the particles from falling out of the notch. The groove, some 0.4" deep, blackened and smouldered with the heat of friction and ignited the heap of dust. Judicious blowing and application of kindling or a 'bidi', lit a fire or cheeroot respectively. However, up to five attempts were required for successful ignition. The firesaws were discarded after use.

Elwin (1939) described firedrills and firesaws

ANIMAL ECOLOGY RESEARCH GROUP,
DEPARTMENT OF ZOOLOGY,
SOUTH PARKS RD.,
OXFORD, ENGLAND,
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among the Maikal Baiga, but the apparatus was, unlike here, used by a pair of operators. Additionally, bamboo (presumably *Dendrocalamus strictus*) was used, requiring tinder of dry leaves or *Bombax malabarica* 'cotton'. In Kanha, *Cordia* was almost exclusively used, bamboo was utilized in the hill area but regarded as inferior for fire making. The *Cordia* method has the advantage, unlike bamboo, of generating sufficient of its own tinder for ignition.

A 'gursa', with slides illustrating its manufacture, has been deposited with the Pitt-Rivers Museum, Oxford. I thank Mungal & Mohan Baiga for their information, the Madhya Pradesh Forest Department for assistance and B. A. L. Cranstone and Maggie Birkhead for advice. The Jt. Sec. (Wildlife), New Delhi, Chief Wildlife Warden (Bhopal) gave permission for fieldwork. The project was funded by the SRC (UK).

PAUL N. NEWTON

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